## Planning Statement for VPDES Permit Application Processing DEO-SCRO

VPDES	<b>OwnerName</b>	Facility	County	
VA0090131	Tyson Foods Inc.	Crewe Feed Mill WWTP	Nottoway	

Outfall #: 001

River Basin: James River (Middle)

Receiving Stream: West Creek, UT

Subbasin: Appomattox

Watershed Code: J11R

River Mile: 1.18

	MGD		MGD
1Q10	0	HF 1Q10	0
7010	0	HF7Q10	0
30Q5	0	HF30Q10	0
30Q10	0	HM	0

**Modeling Notes** 

**WQMP Name** 9 VAC 25-720-60

Statement There are no alloations for this facility included in the plan

TMDL ID None

Impairment Cause None

TMDL Due Date

Completed TMDL Information

Appomattox Basin TMDL - Facility Included, no WLA

TMDL Approval Dates EPA - 8/30/04 & SWCB - 12/20/05

Amanda B. Gray, Water Planning Engineer

Date

#### **MEMORANDUM**

#### Department of Environmental Quality South Central Regional Office

7705 Timberlake Road

Lynchburg, Virginia 24502

Subject:

Planning Service Requests for VPDES Permit Application Processing

To:

Amanda Gray, Water Planning Engineer

From:

Leah Revelle, SCRO (LR

Date:

April 21, 2008

Copies:

Facility Permit Processing File, Planning File

The request for information from the planning section is to be made at the time of sending the reissuance reminder letter to the facility or, for an issuance or modification, at the time of application/modification request receipt.

FACILITY NAME:

Tyson Foods, Inc. - Crewe Feed Mill

VPDES PERMIT NO. VA0090131

EXPIRATION DATE: April 8, 2009

PERMIT ACTION:

Issuance

Reissuance

Modification

PERMIT TYPE:

Major Minor Municipal Industrial Storm Water TMP

TRE

#### PERMIT WRITERS: ATTACH THE FOLLOWING MAPS AND INFORMATION

- Topo map with facility location and outfall locations clearly marked (include any proposed outfalls)
- Site diagram for facilities with multiple outfalls
- Description or map showing effluent flow path if not apparent on topo map
- The outfall numbers, latitude, longitude, receiving stream and topo name in the table below (use an additional sheet if there are more outfalls)

Outfall No.	Latitude	Longitude	Receiving Stream	Topo Name
001	37° 15' 52"	78° 08' 10"	UT, West Creek	Deatonville
002	37° 15',77" 57"	78° 08' 07"	UT, Little Creek	Deatonville
003	37° 15',67" 57 "	78° 08' 30"	UT, Little Creek	Deatonville

X Check if a new FLOW FREQUENCY DETERMINATION is being requested. If checked, provide the previous flow frequency determination memo

Check if a new or revised WATER QUALITY MODEL is being requested. If checked, provide the facility flow and the previous limitations page

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#### **MEMORANDUM**

#### DEPARTMENT OF ENVIRONMENTAL QUALITY

South Central Regional Office - Water Planning 7705 Timberlake Road Lynchburg, VA 24502 434/582-5120

**SUBJECT:** Flow Frequency Determination

Tyson Foods, Inc. - Crewe Feed Mill - VA#0090131

TO:

Leah Revelle

FROM:

Amanda Gray

DATE:

April 23, 2008

COPIES:

File

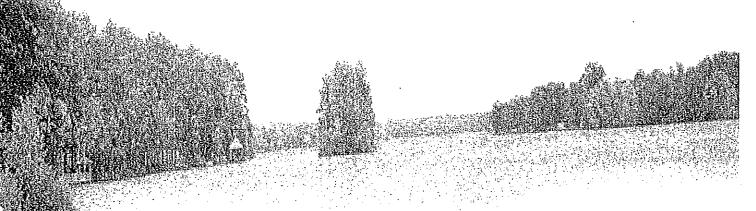
The Tyson Foods, Inc. – Crewe Feed Mill discharges to an unnamed tributary of West Creek in Nottoway County, Virginia. Flow frequencies are required at this site for use by the permit writer in developing the VPDES permit.

The flow frequencies for the receiving stream were determined by inspection of the USGS Deatonville Quadrangle topographic map. The map depicts the stream as intermittent. The flow frequencies for intermittent streams are 0.0 cfs for the 1Q10, 7Q10, 30Q5, 30Q10, HF1Q10, HF7Q10, HF30Q10 and harmonic mean.

If you have any questions regarding this analysis please feel free to contact me.

# <u>Total Maximum Daily Load Development</u> for the

### Appomattox River Basin



Prepared for:
Virginia Department of Environmental Quality
March 1, 2004



Submitted by:

MapTech, Inc., 1715 Pratt Drive; Suite 3200; Blacksburg VA 24060 (540) 2961-7864

ana

Crop and Soil Environmental Sciences,

Wirginia Polytechnic and State University

Blacksburg, VA 24060

#### 3. SOURCE ASSESSMENT

The TMDL development described in this report includes examination of all potential sources of fecal coliform in the Appomattox River watershed. The source assessment was used as the basis of model development and ultimate analysis of TMDL allocation options. In evaluation of the sources, loads were characterized by the best available information, landowner input, literature values, and local management agencies. This section documents the available information and interpretation for the analysis. The source assessment chapter is organized into point and nonpoint sections. The representation of the following sources in the model is discussed in Section 4.

#### 3.1 Assessment of Point Sources

Twenty-nine point sources are permitted to discharge in the Appomattox River watershed through the Virginia Pollutant Discharge Elimination System (VPDES). Figure 3.1 shows their discharge locations. Permitted point discharges that may contain pathogens associated with fecal matter are required to maintain a fecal coliform concentration below 200 cfu/100 ml. Currently, these permitted dischargers are expected not to exceed the 126 cfu/100ml *E. coli* standard. One method for achieving this goal is chlorination. Chlorine is added to the discharge stream at levels intended to kill off any pathogens. The monitoring method for ensuring the goal is to measure the concentration of total residual chlorine (TRC) in the effluent. If the concentration is high enough, pathogen concentrations, including fecal coliform concentrations, are considered reduced to acceptable levels. Typically, if minimum TRC levels are met, bacteria concentrations are reduced to levels well below the standard. Table 3.1 summarizes data from these point discharges.

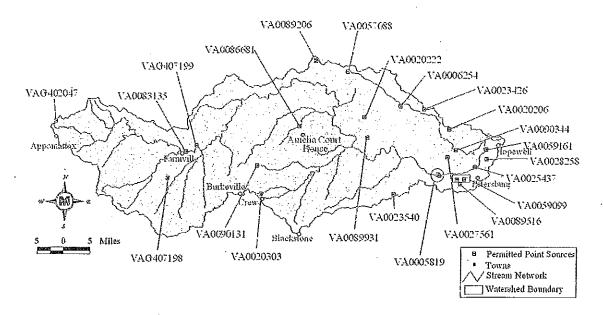


Figure 3.1 Location of VPDES permitted point sources in the Appomattox River watershed.

Table 3.1 Summary of VPDES permitted point discharges in the Appomattox River watershed.

Facility	VPDES#	Design Discharge (MGD)	Permitted For Fecal Control	Data Availability
Farmville WWTP	VA0083135	2.4	Yes	May 1999 - March 2003
Crewe WWTP	VA0020303		Yes.	Feb 1999-Feb 2003
App. River Water Authori	ty VA0005819		Yes	
Swift Creek WTP	VA0006254		Yes	N/A
Thomas Dale West STP	VA0020206		Yes	N/A
Chesterfield Co. Grange		0.0050	1 63	May 1999-July 2002
Elementary WWTP	VA0020222	0.0066	Yes	May 1000 June 2002
DOC Pocahontas	*		140	May 1999-June 2003
Correctional Unit 13	VA0023426	0.055	Yes	May 1999-June 2003
DOC Dinwiddie Field Unit 27 WWTP				
So. Central Wastewater	VA0023540	0.015	Yes	May 1999-June 2003
Authority WWTF	VA0025437			
Children's Home of VA	VA0023437	23 .	Yes	May 1999-June 2003
Baptists Lagoon	VA0027561	0.01	Yes	
Red Hill Mobile Home Park	:	0.01	res	N/A
WWTP	VA0028258	0.039	Yes	May 1000 Mant 2002
US Army Fort Lee - Aerial		•	100	May 1999-March 2003
Delivery Site	VA0059161	0.5	Yes	Nov 2000-Oct 2001
Amelia Co Sanitary District	VA0086681	0.3	Yes	May 1999-June 2003
New Matoaca High School	VA0090344	0.04	Yes	Oct 2002-May 2003
Colonial Pipeline Powhatan	VA0057088	3	No	N/A
Southside VA Training Center				14/1
	VA0059099	0.159	No	N/A
Fighting Creek WWTF	VA0089206	0.1	No	N/A
l'idewater Materials Inc – Dinwiddie	7/10000			- " - "
aylor Road Landfill	VA0089516	0.012	No	N/A
yson Foods Inc - Feed Mill	VA0089931	0.018	No	N/A
esidence	VA0090131	0.0012	No	N/A
esidence	VAG402047	100.0	Yes	ND
	VAG404002*	0.001	Yes	· ND
RJ Land Trust	VAG404092*	0.001	Yes	ND
مسمدية الكناكسة	VAG404107*	0.001	Yes	ND
1 4	VAG404129*	0.001	Yes	ND
• •	VAG404140* ``	0.001	Yes	ND
esidence	VAG404161*	0.001	Yes	ND ND
esidence	VAG407198	0.001	Yes	ND
sidence Location of permits unknown	VAG407199	0.001	Yes	ND ND

ND - no data, facility not required to submit monitoring data